

MEMORANDUM FOR: Director of Central Intelligence
THROUGH: Deputy Director/Intelligence
SUBJECT: Primary Energy Production in the Sino-Soviet Bloc and the Free World

1. This memorandum is in response to your request for comparative data on the growth of primary energy production *in the* ~~in the~~ Sino-Soviet Bloc and the Free World.

~~2. Primary energy is the total resource used in the production of heat and power. It is~~ ^{as} derived principally from solid fuels, petroleum ~~products~~ ², and ~~falling water~~ ^{power}. ~~Increase in its use is an indication of economic development.~~

2/3. During the next five years the Sino-Soviet Bloc plans a higher rate of growth in energy production than the Free World. Bloc energy production in 1955 equalled about 30 percent of ~~the~~ Free World production. In 1960 it will increase to about ~~2~~ 40 percent. Despite this relative increase, however, the absolute gap between ^{energy production in} the Bloc and the Free

World will not decrease. In fact the Free World's primary energy production will increase 15,200 trillion Btu while Bloc production will increase ^{only} 12,600 trillion Btu. Thus the gap will grow about 5 percent.

34. Soviet Bloc energy production ^{depends} is primarily dependent on solid fuels, while Free World energy production is primarily dependent on petroleum ~~products~~. As ~~the~~ production of petroleum increases, however, the importance of solid fuels ^{to the} ~~is declining~~ ^{slightly}. By 1960, solid fuels are expected to supply only about 75 percent of total Bloc energy production compared with about 81 percent in 1955.

~~In 1960 petroleum products will account for 25 percent of total Bloc energy as compared with 18 percent today.~~

45. In 1955, hydro ^{electric} power contributed only ^{0.5} ~~one half of one~~ percent ^{of} total Sino-Soviet Bloc energy production and only 2 percent ^{of} the Free World total. These ratios will not change significantly by 1960.

56. ^{produced} Electricity from nuclear energy will not affect

significantly the world output of primary energy in 1960. In fact, in 1960 ^{the military and "peaceful"} nuclear energy programs of the US and USSR will still use more electricity than will be generated by plants powered with nuclear fuel.

The USSR has announced that by 1960 it will have from 2,000,000 to ~~2,500,000~~ 2,500,000 kilowatts of generating capacity, ⁱⁿ ~~utilizing~~ ^{plants powered with} nuclear fuel. If completed, these power plants ^{could} supply ~~over six~~ ³ percent of total Soviet electric power output.

Announced US plans provide for ^{generating} ~~a~~ capacity of only 800,000 kilowatts by 1960 which could supply about ^{0.5} ~~one half of one~~ percent of total US electric power output forecast for 1960.

67. The USSR, having produced 58 percent of the Bloc's ^{primary} total energy output in 1955, will increase this share to 62 percent in 1960. Conversely, the US share ^{of} in the Free World's ^{total} output will drop very slightly and will amount to about one half of the Free World total in 1960.

78. The attached charts present the above data graphically. The attached table presents detailed data on the regional

growth
~~production~~ of primary energy *(production)* by principal categories.

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